

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98057-3356

In the matter of the petition of

Bombardier

for an exemption from §§ 26.11, 26.33,
26.35, 26.43, 26.45, and 26.49 of Title 14,
Code of Federal Regulations

Regulatory Docket No. FAA-2009-0598

GRANT OF EXEMPTION

By a submission to the Department of Transportation's Federal Docket Management System (FDMS) dated June 23, 2009, Mr. Keith A. Barnett of Bombardier, Inc. – Manager, Airworthiness, Dorval, Quebec, Canada, H4S 1Y9, petitioned the Federal Aviation Administration (FAA) for an exemption from the requirements of Title 14, Code of Federal Regulations (CFR) part 26. This exemption is requested for Bombardier Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) and CL-600-2B16 (604 Variant) airplanes manufactured by Bombardier. Part 26, subpart B, requires development of instructions for continued airworthiness (ICA) applicable to an airplane's electrical wiring interconnection system (EWIS). Part 26, subpart D, requirements are related to airplane fuel tank flammability. Part 26, subpart E, requirements are related to the development of damage tolerance data for repairs and alterations.

The petitioner requests relief from the following regulations:

§ 26.11 Electrical wiring interconnection systems (EWIS) maintenance program, which requires development of instructions for continued airworthiness (ICA) applicable to an airplane's electrical wiring interconnection systems (EWIS).

§ 26.33 Holders of type certificates: Fuel tank flammability, which requires flammability exposure analyses and the establishment of airworthiness limitations for fuel tanks. For fuel tanks determined to be highly flammable, service instructions to make design changes to reduce the flammability or mitigate the effects of an ignition of fuel vapors, and associated ICAs for Continued Airworthiness, must be developed.

§ 26.35 Changes to type certificates affecting fuel tank flammability, which requires flammability exposure analyses, assessments to determine if critical design configuration control limitations are compromised, and the development of design changes and service instructions.

§ 26.43 Holders of and applicants for type certificates—Repairs, which requires development of damage tolerance data for repairs.

§ 26.45 Holders of type certificates—Alterations and repairs to alterations, which requires development of damage tolerance data for repairs and alterations.

§ 26.49 Compliance plan, which requires development of a compliance plan for §§ 26.43, 26.45, and 26.47.

The petitioner supports its request with the following. This information is quoted from Mr. Keith A. Barnett's June 23rd petition letter, with minor revisions for clarity. The complete petition may be found in public docket FAA-2009-0598.

Reasons Why the Exemption Would Not Adversely Affect Public Safety

Title 14, Code of Federal Regulations (14 CFR) 26 rules apply to transport category airplanes that “as a result of original type certification or later increase in capacity have: (1) A maximum type-certificated passenger capacity of 30 or more, or (2) A maximum payload capacity of 7,500 pounds or more.” As explained in the regulatory preambles, the phrase “as a result of original type certification” was included in the rule to preclude manipulation of capacity by designers to avoid complying with the new requirements.

The subject models do not exceed the thresholds of the applicability criteria identified above. They are, however, required to comply with 14 CFR 26 as later approved versions included on Type Certificate Data Sheet (TCDS) A21EA, have increased the passenger capacity of the design which exceeds the thresholds.

The basis for such an exemption would be that the broad applicability language in the rules was intended to prevent manipulation on the part of design approval holders (DAH) to avoid compliance with the part 26 rules. Because these models' application dates were prior to the effective dates of the rules, Bombardier could not have designed the airplanes' capacities to avoid compliance. Therefore, these models fall outside of those that the FAA intended to capture in the applicability of the rules.

Reason the Exemption Would Benefit the Public Interest

Granting this exemption will benefit the public interest by freeing up valuable FAA resources that will no longer be needed to evaluate and approve the associated suite of compliance documentation to support this applicability demonstration, particularly when these aircraft were not under the original intent of the rule. The intended safety level aimed by the FAA will not be adversely affected by this exemption.

Federal Register publication

A summary of the petition was published in the *Federal Register* on August 4, 2009 (74 FR 50397). No comments were received regarding the exemption request.

The FAA's analysis

The FAA has developed criteria to consider when deciding whether to grant or deny a design approval holder's (DAH) petition for exemption from part 26 requirements. These criteria were meant as a general guide to making decisions about such requests and were not developed for any specific request. The FAA uses these criteria as a starting point for making its decision. However, other factors may also be considered before a final decision is made on any particular exemption request.

The criteria are illustrated in the table that follows.

Table 1

**Criteria for Considering Eligibility for Exemption
from §§ 26.11, 26.33, 26.35, 26.37, 26.39, 26.43, 26.45, 26.47, or 26.49**

Item	If the airworthiness authority for the state of design is	And	And ⁴	And	And	Then
1	The FAA	No airplanes are operating under part 121 and it is unlikely that any will do so in the future ³	No airplanes are operating under part 125 and it is unlikely that any will do so in the future ³	No airplanes are operating under part 129 (N-registered) and it is unlikely that any will do so in the future ³	No airplanes are being operated by a foreign air carrier and it is unlikely that any will do so in the future ³	The DAH may be eligible for an exemption
2	The FAA	Airplanes are operating under part 121 but no airplanes will be operated under part 121 after the operational-rule compliance date ¹ and it is unlikely that any will return to such service in the future ³	Airplanes are operating under part 125 but no airplanes will be operated under part 125 after the operational-rule compliance date ¹ and it is unlikely that any will return to such service in the future ³	Airplanes are operating under part 129 (N-registered) but no airplanes will be operated under part 129 (N-registered) after the operational-rule compliance date ¹ and it is unlikely that any will return to such service in the future ³	Airplanes are being operated by a foreign air carrier but no airplanes will be operated by a foreign air carrier after the operational-rule compliance date ¹ and it is unlikely that any will return to such service in the future ³	The DAH may be eligible for an exemption
3	Not the FAA	No airplanes are operating under part 121 and it is unlikely that any will do so in the future ³	No airplanes are operating under part 125 and it is unlikely that any will do so in the future ³	No airplanes are operating under part 129 (N-registered) and it is unlikely that any will do so in the future ³		The DAH may be eligible for an exemption
4	Not the FAA	Airplanes are operating under part 121 but no airplanes will be operated under part 121 after the operational-rule compliance date ² and it is unlikely that any will return to such service in the future ³	Airplanes are operating under part 125 but no airplanes will be operated under part 125 after the operational-rule compliance date ² and it is unlikely that any will return to such service in the future ³	Airplanes are operating under part 129 (N-registered) but no airplanes will be operated under part 129 (N-registered) after the operational-rule compliance date ² and it is unlikely that any will return to such service in the future ³		The DAH may be eligible for an exemption

¹ The design-approval holder must demonstrate that these airplanes will not be operating under part 121, 125, or 129, or operated by a foreign air carrier, after the operational-rule compliance date by obtaining documentation of such from the current owners/operators of the airplanes.

² The design-approval holder must demonstrate that these airplanes will not be operating under part 121, 125, or 129 after the operational-rule compliance date by obtaining documentation of such from the current owners/operators of the airplanes.

³ Arguments for the likelihood of an airplane not entering into air-carrier service in the future should center on the airplane's age and/or current configuration.

⁴ This criterion only applies to the fuel tank flammability rules (i.e., §§ 26.33 and 26.35).

The determination of whether an airplane is operating under part 121, 125, or N-registered 129 is based on whether that particular airplane is listed on an air carrier's Operations Specifications.

The rationale behind the criteria contained in the table above is this: The rules require DAHs to develop data for use by operators. If there are no operators for a particular airplane who are required by the rules to use such data, it would be a poor use of resources for the DAH to develop it. Therefore, it would benefit both the DAH and the public as a whole to spend resources on more important safety issues rather than on developing data that will not be used. In addition, granting such an exemption would not adversely affect safety because there are no airplanes that would be required to incorporate the data, nor is it likely that there will be any in the future.

The FAA has reviewed Bombardier's request and has determined that granting this exemption would not have an adverse effect on public safety and would be in the public interest based on the following information:

The FAA is not the airworthiness authority for the state of design for the Bombardier Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) and CL-600-2B16 (604 Variant) airplanes. Via teleconference between the FAA and Bombardier on October 16, 2009, Bombardier confirmed that none of these model airplanes are operating in part 121, 125, or N-registered 129 service. The FAA's data supports Bombardier's statement. Further, as business jets, these models are not normally operated as air carriers. The characteristics of the airplane and internal layouts are not generally acceptable for commercial carriage. As stated below, this exemption does not grant relief to related operational requirements in parts 121, 125 or 129. Any person who chooses to enter service under those parts would need to comply with those operational requirements. We believe that no person would choose to do so because of the associated costs of modifying the airplane and complying with these operational requirements. Therefore, the FAA finds that it is unlikely the Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) and CL-600-2B16 (604 Variant) airplanes will ever be used in service under parts 121, 125, or N-registered 129.

As a result, Bombardier Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) and CL-600-2B16 (604 Variant) airplanes meet the baseline exemption criteria for part 26. There are no other factors to be considered regarding this petition for exemption.

Additional information

This exemption grants relief to Bombardier from having to meet the airworthiness requirements of §§ 26.11, 26.33, 26.35, 26.43, 26.45, and 26.49. This exemption does not grant relief from the related operational requirements contained in §§ 121.1109, 121.1111, 121.1117, 125.509, 129.109, 129.111 or 129.117. Should a person choose to operate a Bombardier Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) or CL-600-2B16 (604 Variant) airplane under part 121, 125, or part 129 beyond the operational compliance deadlines as stated in §§ 121.1109, 121.1111,

121.1117, 125.509, 129.109, 129.111 or 129.117, that person will be required to comply with those operational requirements.

Also, as a reminder, Bombardier Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) and CL-600-2B16 (604 Variant) airplanes are certified to the damage tolerance requirements of § 25.571, *Damage-Tolerance and Fatigue Evaluation of Structure*. In addition, the Bombardier Model CL-600-2B16 (604 Variant) airplanes are certified to the requirements of § 25.1529, *Instructions for Continued Airworthiness* as documented on TCDS A21EA. Bombardier is responsible for the detail design data associated with these airplane models, including damage tolerance data and ICA, as required (for the baseline airplane, as well as repairs and alterations developed by Bombardier) to maintain the original certification basis.

Holders and Applicants of Amended Type Certificates and Supplemental Type Certificates

Section 26.11 requires an applicant for an amended TC or supplemental type certificate (STC) to evaluate whether the design change necessitates a revision to the EWIS ICA developed by the TC holder and approved by the FAA Oversight Office. Section 26.47 requires STC holders and applicants to use damage tolerance data developed by the TC holder to identify all alterations that affect fatigue critical baseline structure and fatigue critical alteration structure. Section 26.35 applies to holders of, and applicants for, approvals of certain design changes to airplanes meeting the applicability criteria of § 26.33(a); and requires certain holders of and applicants for STCs and amended TCs to conduct assessments to determine if the fuel tank system, as modified by their design changes, compromises critical design configuration control limitations (CDCCL) developed by the TC holders. Since in this case it would be Bombardier applying for an amended TC, Bombardier would be exempt from the requirements of §§ 26.11, 26.47, and 26.35 if the FAA grants its petition. However, if the FAA grants Bombardier's petition, some applicable STC holders and applicants will not be able to comply with the requirements of §§ 26.11, 26.47, and 26.35. So the FAA considered the impact on these entities when deciding if a grant of exemption should be issued, and if so, whether it should be expanded to include the applicable STC holders and applicants.

The FAA's decision

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to me by the Administrator, Bombardier, is hereby granted an exemption from §§ 26.11, 26.33, 26.35, 26.43, 26.45, 26.47, and 26.49 for the Bombardier Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) and CL-600-2B16 (604 Variant) airplanes.

In addition, since the FAA does not intend for these rules to apply to an STC holder or applicant if they do not apply to the type certificate holder for the airplane model being modified, this grant is extended to holders of, and applicants for, STCs that have modified or will modify Bombardier Model CL-600-1A11 (600), CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A Variant), CL-600-2B16 (601-3R Variant) and CL-600-2B16 (604 Variant) airplanes.

This grant of exemption is applicable to TCs, amended TCs and STCs as long as those design changes that do not result in capacities that exceed those of the subject part 26 rules. If any of these model airplanes are modified in a manner that results in a passenger seating capacity of 30 or more, or a maximum payload of 7,500 pounds or more, this exemption would not apply to those design changes.

Issued in Renton, Washington, on OCT 22 2009



Ali Bahrami
Manager, Transport Airplane Directorate
Aircraft Certification Service